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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,402	07/18/2003	Michael R. Schwarz	CS-7890	4637
34469 BAYER CROP	7590 11/26/201 SCIENCE LP	EXAMINER		
Patent Departm	ent	CLAYTOR, DEIRDRE RENEE		
2 T .W. ALEXANDER DRIVE RESEARCH TRIANGLE PARK, NC 27709			ART UNIT	PAPER NUMBER
			1627	
			NOTIFICATION DATE	DELIVERY MODE
			11/26/2010	ELECTRONIC

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

blair.wilson@bayercropscience.com pamula.ramsey@bayercropscience.com destiny.davenport@bayercropscience.com

Office Action Summary		Applicati	on No.	Applicant(s)				
		10/623,4	02	SCHWARZ, MICHAEL R.				
		Examine	•	Art Unit				
		Renee Cl	aytor	1627				
Period fo	The MAILING DATE of this communicati r Reply	on appears on th	e cover sheet with the	correspondence ad	ddress			
WHIC - Exter after - If NC - Failu Any r	CORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAIL Issions of time may be available under the provisions of 37 SIX (6) MONTHS from the mailing date of this communical period for reply is specified above, the maximum statutor re to reply within the set or extended period for reply will, be ply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	ING DATE OF THE CFR 1.136(a). In no extension.  y period will apply and we by statute, cause the apply and we have apply and we have apply and we have apply and apply apply and apply apply and apply a	HIS COMMUNICATIO ent, however, may a reply be ti ill expire SIX (6) MONTHS fron dication to become ABANDONE	N. mely filed n the mailing date of this of ED (35 U.S.C. § 133).	·			
Status								
1)	Responsive to communication(s) filed or	n 18 August 2011	)					
•	This action is <b>FINAL</b> . 2b) This action is non-final.							
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٠,١	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disnositi	on of Claims	maer En parte Q	,,	00 0101 2101				
		li 4!						
•	Claim(s) <u>17-22</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are w	ntnarawn from co	nsideration.					
•	Claim(s) is/are allowed.							
	Claim(s) <u>17-22</u> is/are rejected.							
•	Claim(s) is/are objected to.	and/an alastian	a autino ma a mt					
اـــا(٥	Claim(s) are subject to restriction	and/or election i	equirement.					
Applicati	on Papers							
9)	The specification is objected to by the Ex	caminer.						
10)	The drawing(s) filed on is/are: a)[	accepted or b	☐ objected to by the	Examiner.				
	Applicant may not request that any objection	to the drawing(s)	oe held in abeyance. Se	ee 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the	correction is requi	ed if the drawing(s) is ob	ojected to. See 37 C	FR 1.121(d).			
11)	The oath or declaration is objected to by	the Examiner. N	ote the attached Office	e Action or form P	TO-152.			
Priority ι	ınder 35 U.S.C. § 119							
	Acknowledgment is made of a claim for f			ı)-(d) or (f).				
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).							
* 0	See the attached detailed Office action fo	•		ed				
	de the attached detailed Office action to	i a list of the cert	med copies not receive	eu.				
Attachmen	Ne)							
_	e of References Cited (PTO-892)		4) Interview Summary	v (PTO-413)				
2) Notic	e of Draftsperson's Patent Drawing Review (PTO-9	948)	Paper No(s)/Mail D	oate				
_	nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date		5) Notice of Informal (6) Other:	Patent Application				

### **DETAILED ACTION**

## Request for Continued Examination

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/18/2010 has been entered.

## Response to Arguments

Applicants argue over the 35 USC 103 rejection over Turnblad in view of Senn and Szczeoanski. In particular, Applicants argue that Turnblad does not teach the method of claim 17, in particular, reducing phytotoxicity to corn or maize caused by a herbicide application to corn or maize but instead teaches an insecticidal coating that reduces the phytotoxicity of the insecticide on the seed. Applicants argue that Turnblad uses a binder and a filler to protect the treated seeds as opposed to the present claims. In addition, it is argued that Turnblad fails to provide any examples where an herbicide is included in the seed coating. Applicants argue that Senn fails to recognize or identify the reduction of phytotoxicity of imidacloprid and thiamethoxam when applied with an herbicide. It is further argued that Szczepanski et al. fails to teach or suggest that triazines or chloroacetamides should be selected from the numerous categories of optional herbicides mentioned in Turnblad.

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In response to the above arguments, it is noted that Turnblad teaches an insecticidal coating for a seed comprising an insecticide which is preferably imidacloprid (Col. 1, lines 28-39; Col. 4, lines 14-37). Turnblad further teaches that in addition to the insecticidal coating layer, the seed may be treated with other pesticides including herbicides (Col. 6, lines 39-41) which include chloroacetamides and triazines (Col. 7, lines 3-5). It is recognized that Turnblad does not specify that the reduction of phytotoxicity to corn or maize is produced by herbicide application. However, Turnblad does teach the desirability of providing an insecticide and herbicide treatment together and an exemplification of every embodiment does not have to be taught in the reference to qualify as prior art.

It is noted that the Senn reference was used for the specific teaching that the compounds thiamethoxam or imidacloprid can be applied directly to the seed and the usefulness of this and the rate of application. In addition, Szczeoanski teaches a method of treating maize plants or seeds by the use of compounds of formula I, which are triazine derivatives, and that the treatment can be carried out before, simultaneously with or after the application of the herbicide (Col. 5, lines 46-55; Col. 6, lines 23-25 and 43-46). As taught in the abstract, the triazine derivates are used for the protection of maize against the harmful effects of herbicidal compositions. Therefore, Szczeoanski teaches the desirability of applying triazine derivatives and herbicides for phytotoxicity caused by herbicide application.

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# Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 17-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Turnblad et al. (US Patent 5,876,739) in view of Senn et al. (WO 01/26468) and Szczepanski et al. (US Patent 4,523,947).

Turnblad et al. teaches insecticidal coating for a seed comprising an effective amount of an insecticide and among the insecticides listed include imidacloprid (Col. 1, lines 29-36; Col. 4, lines 14-37) and thiamethoxam (Col. 4, lines 66-67 – Col. 5, lines 1-10 or Formula II). In addition to the insecticidal coating layer, the seed may be treated with other herbicides of which include chloroacetamides and triazines (Col. 6, lines 39-42; Col. 7, lines 3-6). The insecticidal coating on the seed is effective against insect pests without causing phytotoxicity to the seed (Col. 2, lines 45-50). Particular crop seeds that can be treated according to the invention include corn (also known as maize; Col. 5, lines 65-67 – Col. 6, lines 1-3).

Though Turnblad et al. teaches the combination of the insecticide and the herbicide, there is no specific teaching by way of an example exemplifying the two being applied to corn (maize) seed for phytotoxicity caused by a herbicide application.

Senn et al. teach a method of improving the growth of plants comprising applying to the locus a compound of Formula Ia (thiamethoxam) or imidacloprid (page 3, second

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full paragraph). Crops that can be improved according to the method include maize (page 5, first full paragraph). Senn et al. also teaches that the compositions are suitable for the treatment of plant seeds (see second full paragraph on page 8). Senn et al. teaches that the compositions can provide pesticidal activity in addition to enhancing plant growth (see page 4). Senn et al. teach application to the leaves of the plants (meeting the limitation of claim 18; last paragraph of page 7 spanning into page 8). Due to Senn's teachings of applying the composition to the seed and the foliage of the plant, Senn reads on pre-emergent and post-emergent treatment (claim 19).

Szczepanski et al. teaches the use of triazines for protecting maize plants against the harmful effects of chloroacetamides and the administration of the two herbicides together (Col. 1, lines 5-10). Szczepanski et al. teaches treating the seed of the maize plant or the soil where the plant is to be planted (Col. 5, lines 46-55).

Accordingly, it would be obvious to a person of ordinary skill in the art to use the combination treatment of an insecticide such as imidacloprid or thiamethoxam with herbicides such as triazines and chloracetamide as taught by Turnblad et al. to treat seeds or plants of corn or maize because the prior art teaches that the herbicides triazine and chloracetamide are useful in treating corn or maize seeds. One would be motivated to use the insecticide and herbicide of the present invention because it is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. The idea of combining them flows logically from their having been

individually taught in the prior art. In re Kerkhoven, 626 F.2d 846, 205 USPQ 1069, 1072 (CCPA 1980).

It is noted that Senn et al. teach that the insecticide can be applied at a rate of application of from 0.0005 to 1 kg per 1 kg of material to be protected. Furthermore, it is obvious to vary and/or optimize the amount of insecticide provided in the composition, according to the guidance provided by Senn et al., to provide a composition having the desired properties such as the desired concentrations to the seed. As Senn et al. discusses on the last paragraph of page 8 spanning into page 9, the application conditions depend essentially on the nature of the material and on its environmental factors and one would be able to determine which doses are non-phytotoxic. It is noted that "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Regarding the limitation of the soil temperature being from about 4°C to about 25 °C, Senn et al. and Szczepanski et al. teach application of the compositions to the soil at the plant locus as discussed above, and accordingly it is considered that one of ordinary skill in the art at the time of the invention was made would have found it obvious to apply the composition to soil at the native or outdoors temperature of the soil, including temperatures from 4°C to about 25 °C, with the expectation of achieving insecticidal effects as well as reduction in phytotoxicity. It is noted that "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover

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the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

### Conclusion

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### **Contact Information**

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renee Claytor whose telephone number is (571)272-8394. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Renee Claytor

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1627